

disc inside the device. Moreover, the device is relatively small in size because of the independent control of the extraction devices.

For simple realization of the crossing movement of the extraction devices as they travel in opposite directions, in accordance with an advantageous embodiment of the invention, each extraction device has a sled that is guided to glide on a horizontal support rod and has an extendable and retractable gripper slide element for a disc holder; one sled is secured to the forward belt run, and the other sled is secured to the rear run, of a belt drive or the like coupled to a drive motor whose direction of rotation can be reversed.

To effect a rapid transfer of a disc holder from one disc magazine to the other, the following sequence of steps is preferably performed during the transfer of a disc holder from one disc magazine to the opposite disc magazine:

an extraction device associated with the disc magazines is brought into engagement with the disc holder,

this first extraction device conveys the disc holder into the transport device, whereby, at the end of the transport movement, the first extraction device and the other, second extraction device assume the transport device position, in which they do not engage the disc holder, the second extraction device now conveys the disc holder out of the transport device and into the other disc magazine, whereby, at the end of the transport movement, the two extraction devices assume a ready position, in which they do not engage a disc holder of the associated disc magazine.

As an alternative, it is also possible to effect the following sequence of steps in transferring a disc holder from one disc magazine to the opposite disc magazine:

an extraction device associated with the disc magazines is brought into engagement with the disc holder,

this first extraction device conveys the disc holder into the transport device, whereby, at the end of the transport movement, the first extraction device maintains its engaged position and the other, second extraction device assumes a transport device position, in which it does not engage the disc holder,

the second extraction device is brought into engagement with the disc holder,

the first extraction device is disengaged from the disc holder, and

the second extraction device subsequently conveys the disc holder out of the transport device and into the other disc magazine, whereby, at the end of the transport movement, the two extraction devices assume a ready position, in which they do not engage a disc holder of the associated disc magazine. In this case, the disc holder is always in engagement with one of the extraction devices during the transfer process, practically precluding a loss of engagement due to a disturbance in the control during the transfer process.

To achieve a stable guidance per se of the transport device, in accordance with a further modification of the invention, the transport device is seated to glide on two parallel, vertically-extending guide rods, and can be moved up and down by way of a belt drive, whose drive motor is reversible in its direction of rotation. Of course, a cable-drawn drive, spindle drive or the like can be used instead of the belt drive. A sensor for determining the lower initial position of the transport device is advisably associated with the transport device. A sensor for monitoring the actual presence of a disc in the disc holder located in the transport device is also preferably associated with the transport device.

To achieve a structurally simple drive for moving the sleds of the extraction device in opposite directions, in accordance with an embodiment of the invention, one of the guide rods of the transport device is rotatably seated, and is connected by way of a gear, which is fixed against relative rotation and is displaceable on the rod, to the toothed belt of the belt drive coupled to the sleds in order to convert the rotational movement of the rod into a displacement movement of the sleds; the rod is also connected by way of a further belt drive to the drive motor for the sleds. To check the position of the extraction devices on the transport device, the rotatable guide rod is preferably connected by way of a further belt drive to a rotatable encoding disk that cooperates with sensors that generate position pulses to determine the position of the extraction device. At least two sensors are associated with the encoding disk for determining the ready position and the transport device position of the extraction devices.

In a particularly advantageous embodiment of the extraction devices, a reversible sliding control element is associated with the gripper slide elements of the sleds such that, during a movement of the sleds in opposite directions from the ready position, in which the gripper slide elements, in their retracted position, are respectively located opposite a recess of a disc holder in the opposite disc magazine, or from the transport device position, in which the gripper slide elements, in their retracted position, are respectively located opposite a recess in a disc holder conveyed into the transport device, the gripper slide element of one or the other sled is alternately forced to be transferred into a position of engagement with the disc holder. The result is reliable actuation of the gripper slide elements.

So that the gripper slide elements can meet in one plane, in accordance with a modification of the subject of the invention, the gripper slide elements are bent at opposite right angles in their forward region such that, during a crossing movement of the sleds in opposite directions, in which one gripper slide element is always in the extended position and the other gripper slide element is in the retracted position, the forward regions of the gripper arms pass each other in one plane, and can be brought into engagement with the disc holder in the same plane. Each sled advisably extends, with a projecting catch, into a guide groove, which is configured in an inserted part of a chassis disposed in the housing of the transport device; the oppositely-located grooves define the same plane of the gripper slide elements.

For a reliable back-and-forth movement of the sleds and, simultaneously, a reliable extension and retraction movement of the gripper slide elements, in a further embodiment of the invention, a sled is respectively seated on one of two support rods superposed in one plane, and a trunnion guided to glide in an oblong hole of the associated sled is secured to the end side of the gripper slide elements of the upper and lower sleds; the trunnion of the gripper slide element of the upper sled cooperates with an adjustable, upper guide bar and ramps disposed stationarily at the end of the bar, and the trunnion of the gripper slide element of the lower sled cooperates with an adjustable, lower guide bar and ramps disposed stationarily at the end of the bar. The ramp associated with the right side of the upper guide bar preferably determines the ready position of the gripper slide element of the upper sled for extracting a disc holder from the right disc magazine, and the ramp associated with the left side of the lower guide bar preferably determines the ready position of the gripper slide element of the lower sled for extracting a disc holder from the left disc magazine. Analogously, the